



Guidance for Tier I and Tier II Non-Municipal Solid Waste Landfills

State and federal solid waste rules and regulations pertaining to non-municipal solid waste landfills (NMSWLFs) are cited in the Idaho Solid Waste Management Rules (IDAPA 58.01.06), the Environmental Protection and Health Act (Title 39, Chapter 1, Idaho Code), and Code of Federal Regulations (Title 40, Part 257). The Idaho Department of Environmental Quality (DEQ) and the seven Public Health Districts utilize all applicable state and federal regulations and policies when governing solid waste.

The purpose of these regulations is to protect humans and the environment from the harmful effects of solid waste disposal. Specifically, the protection of groundwater is one of the DEQ's top priorities. It is extremely important that all operations at NMSWLFs are conducted in a manner that will minimize the potential negative effects to groundwater.

NMSWLFs only accept solid waste that is not mixed with waste generated by households or is not specifically excluded from regulation under Idaho's Solid Waste Management Rules. This document has been developed by the DEQ to assist the public and NMSWLF operators to recognize wastes acceptable for emplacement in Tier I and Tier II NMSWLF facilities.

Landfill Tier Classifications within the Solid Waste Management Rules

Tier I Landfill – accepts materials for disposal that are not likely to produce leachate and has a total disposal capacity of less than or equal to two thousand (2000) cubic yards. Tier I landfills are required to submit notice to DEQ and the local district health department. The notice shall include; the owner's name, the operator's name, physical location of site, mailing address, facility phone number and type of solid waste management facility. The owner or operator shall also maintain on-site, documentation that verifies the facility's Tier I status. Examples of this documentation include but are not limited to; daily log of quantities and types of waste received, operating plan that identifies acceptable waste types and screening procedures, log of rejected loads containing unauthorized waste. Tier I landfills need to comply with the requirements contained in IDAPA 58.01.06.011. Facilities failing to comply with IDAPA 58.01.06.011 or to maintain documentation verifying Tier I status may be reclassified as a Tier II or Tier III facility and required to comply with all applicable requirements.

Tier II Landfill – are facilities not disposing Conditionally Exempt Small Quantity Generator (CESQG) hazardous waste, not disposing materials with a high human pathogenic potential, managing solid waste in a manner or volume that will form toxic leachate or gas, or managing solid waste in a manner or volume that is likely to pose a substantial risk to human health or the environment and is a landfill with a total disposal capacity greater than two thousand (2000) cubic yards. Tier II landfills are required to obtain site and design approval from DEQ and operating and closure/post-closure plan approval from the local district health department. Requirements for Tier II facilities are contained in IDAPA 58.01.06.012.

Note – Prior to construction and operation, it is recommended that the owner/operator check with county or city government to determine if separate approval is required.

Waste Types

The following waste types are examples and listing specific wastes is not intended to be all-inclusive. Operating plans should identify wastes that will be received at the facility.

Inert Waste - The following waste are examples of materials that are considered inert waste (IDAPA 58.01.06.005.19). Facilities **only** accepting inert waste are exempt from the Solid Waste Management Rules. Facilities accepting a mixture of these waste and regulated waste must comply with the Solid Waste Management Rules.

- Asphalt – does not include asphalt contaminated with automotive fluids or contaminated with other materials.
- Earth – gravel, sand, uncontaminated soil, rock, stone
- Masonary – bricks, cinder block, mortar, concrete

Regulated Waste - The following waste are examples of materials that are regulated solid waste. Facilities accepting these materials must comply with the requirements for the specific Tier level within the Solid Waste Management Rules.

- Metals – aluminum, brass, copper, iron, steel (while these materials may be landfilled, the Dept encourages recycling when possible)

Examples: plumbing fixtures & piping, sheet metal, nails, studs, rebar, banding, electrical fixtures & wiring (no fluorescent lights or ballasts)

- Plastics/Vinyl - polyethylene, polyvinyl chloride (PVC), polystyrene

Examples: piping, insulation (extruded and sheeting), Styrofoam, flooring (including laminate), siding, doors, window casings

- Wood (untreated) – lumber, pallets, silvicultural waste (trees, brush)
- Miscellaneous – cardboard, glass / ceramics, roofing materials (composition and roofing paper, but not roofing cement), wall coverings (plaster, drywall, gypsum board)
- Special Waste – asbestos

Prohibited Waste - In addition to municipal wastes, the disposal of other wastes in a Tier I or Tier II NMSWLF are prohibited. These wastes include, but are not limited to:

- Carpet (from households, motels, hotels, bunkhouses, ranger stations and crew quarters)
- Electronic waste
- Furniture (from households, motels, hotels, bunkhouses, ranger stations and crew quarters)
- Hazardous waste (e.g: batteries, paint, solvents, lead, mercury, etc.)

- Household (including clothing)
- Untreated Medical / Healthcare wastes (regulated waste must be decontaminated as defined in 29 CFR 1910.1030)
- Petroleum or petroleum-based products (e.g: oil, caulking, adhesives, epoxies)
- Pesticides / Herbicides / Insecticides
- Tires
- Unopened or opaque garbage sacks (unable to identify contents)
- Wood - treated, especially that containing creosote, pentachlorophenol, or copper-chrome-arsenate (e.g: fencing, decking, utility poles, laminated beams, freshwater pilings, particleboard, etc.)
- Yard Waste (from households, motels, hotels, bunkhouses, ranger stations and crew quarters)

Variance – A variance may be granted for siting, operating or closure requirements provided the owner and operator of the facility demonstrate the variance is as protective of public health and the environment as the requirement. The variance shall be in writing with appropriate supporting documentation.

Operations

The following are recommendations that should be followed when operating a NMSWLF:

- **Train Facility Employees**

Educate staff on rules, regulations, and guidance pertaining to solid waste management, as well as on potential environmental impacts and liability issues resulting from improper waste management. Develop and implement a comprehensive training program to help staff identify prohibited waste items and enforce site restrictions.

- **Screen the waste**

Develop and follow appropriate waste screening and sorting procedures in order to ensure that only allowable materials will be placed in the facility. *Special effort should be made to ensure that vessels do not contain chemicals in excess of residues. Paint cans, adhesive buckets, etc. must be empty in order to be accepted for disposal.*

Do not accept unopened or opaque garbage sacks (or other containers that prevent the facility operator from identifying contents).

Remove prohibited wastes from the waste pile and redirect their disposal to an appropriate facility.

- **Turn people away**

Do not be afraid to send customers to the MSWLF or other appropriate facility to dispose of prohibited waste.

- Control illegal dumping

Identify problem customers and prohibit their access to the site.

Cite or prosecute habitual illegal dumpers.

- Increase signage

Provide plenty of signage so customers are knowledgeable about prohibited wastes.

- Increase surveillance

Station employees at the working face to identify the waste being discarded and ensure prohibited waste is not emplaced at the NMSWLF.

Over time, the consistent application of the practices listed above will greatly aid in the management of the solid waste facility, reduce liability, and protect the environmental integrity of the site.

DEQ always is available to offer technical assistance. If you have any questions or comments, please contact your local DEQ Regional Office or local district health department.

GLOSSARY

There are several important solid waste definitions contained within the regulations. The following definitions will assist in distinguishing one waste from another:

Decontaminated waste (medical): medical waste that has been physically or chemically treated to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.⁶

Electronic waste: Unwanted or unusable computers, monitors, televisions, audio equipment, printers, cellular phones and other electronic devices.

Garbage: Any waste consisting of putrescible animal and vegetable materials resulting from the handling, preparation, cooking and consumption of food, including waste materials from households, markets, storage facilities, handling and sale of produce and other food products.¹

Hazardous waste: A waste or combination of wastes of a solid, liquid, semisolid, or contained gaseous form which, because of its quantity, concentration or characteristics (physical, chemical or biological) may:

- (a) Cause or significantly contribute to an increase in deaths or an increase in serious, irreversible or incapacitating reversible illnesses; or
- (b) Pose a substantial threat to human health or to the environment if improperly treated, stored, disposed of, or managed. Such wastes include, but are not limited to, materials which are toxic, corrosive, ignitable, or reactive, or materials which may have mutagenic, teratogenic, or carcinogenic properties but do not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to national pollution discharge elimination system permits under the federal water pollution control act, as amended, 33 U.S.C., section 1251 et seq., or source, special nuclear, or byproduct material as defined by the atomic energy act of 1954, as amended, 42 U.S.C., section 2011 et seq.⁴

Household Waste: Any solid waste, including garbage, trash, and sanitary waste in septic tanks, derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day use recreation areas.^{1,2,3}

Industrial Solid Waste: Solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under subtitle C of RCRA. Such wastes may include, but are not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer and agricultural chemicals; food and related products and byproducts; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment;

and water treatment. This term does not include mining waste or oil and gas waste.^{2,3}

Inert Wastes: Noncombustible, non-hazardous, non-putrescible, non-leaching solid wastes that are likely to retain their physical and chemical structure under expected conditions of disposal, including resistance to biological attack.^{1,2}

Leachate: A liquid that has passed through or emerged from waste and contains soluble, suspended, or miscible materials removed from such waste.^{1,2,3,5}

Municipal Solid Waste Landfill (MSWLF): A discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR 257.2. A MSWLF unit also may receive other types of RCRA subtitle D wastes, such as commercial solid waste, non-hazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion.^{1,2,3}

Non-Municipal Solid Waste: A solid waste that is not mixed with household waste or not excluded by IDAPA 58.01.06, Subsection 001.03. Examples of non-municipal solid waste may include inert wastes, waste in a composting operation, and septage for a septage disposal site.¹

Non-Municipal Solid Waste Landfill (NMSWLF): A discrete area of land or an excavation that accepts only non-municipal solid wastes.¹

Open Dump: A facility for the disposal of solid waste that does not comply with this part (40 CFR 257).³

Regulated (medical) waste: Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.⁶

Special Waste: Wastes that require special treatment or handling after it arrives at the disposal site. The term includes, but is not limited to, asbestos containing material, petroleum contaminated soils, low-level PCB containing material, low-level dioxin containing material and uncut tires.⁵

Wood Waste: Solid Waste consisting of wood pieces or particles generated as a byproduct or waste from the manufacturing of wood products, handling or storage of raw materials, and trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hog fuel, and log yard waste, but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.⁵

Yard Waste: Weeds, straw, leaves, grass clippings, brush, wood, and other natural, organic, materials typically derived from general landscape maintenance activities.¹

References:

- 1) Idaho Administrative Procedures Act, Section 58.01.06, Solid Waste Management Rules
- 2) Code of Federal Regulations, Title 40, Part 258.2
- 3) Code of Federal Regulations, Title 40, Part 257.2
- 4) Title 39, Chapter 44, Hazardous Waste Management Act
- 5) Title 39, Chapter 74, Idaho Solid Waste Facilities Act
- 6) Code of Federal Regulations, Title 29, Part 1910.1030